

— EXHIBIT 1 —

1 THE WESTERN DISTRICT OF MISSOURI
2 SOUTHERN DIVISION
3 MICHELLE ANDERSON,)
4 individually and on behalf of)
all others similarly situated,))
5 Plaintiff,)
6 -vs-) No. 6:17-cv-03244-BP
7 FORD MOTOR COMPANY,)
8 Defendant.)
_____)

9 UNITED STATES DISTRICT COURT
10 WESTERN DISTRICT OF WASHINGTON
11 AT TACOMA
12 JACOB BEATY and JESSICA BEATY)
on behalf of themselves and)
13 all others similarly situated,))
14 Plaintiffs,)
15 -vs-) No. 3:17-cv-05201-RBL
16 FORD MOTOR COMPANY,)
17 Defendant.)
_____)

18 VIDEOTAPED DEPOSITION OF THOMAS L. READ

19 Tuesday, March 19, 2019
20
21 REPORTED BY: KIPP HODGE, CSR #7642
22
23
24

25 Job No. CS3261593

1 APPEARANCES:

2
3 FOR THE PLAINTIFFS:

4 GREG COLEMAN LAW
First Tennessee Plaza
5 800 S. Gay Street, Suite 1100
Knoxville, Tennessee 37929
6 BY: MARK E. SILVEY, ESQ.
RACHEL SOFFIN, ESQ.

7
8 AND

9 LAW OFFICES OF TERRELL MARSHALL LAW GROUP
936 North 34th Street, Suite 300
Seattle, Washington 98103
10 BY: BENJAMIN M. DRACHLER, ESQ.

11
12 FOR THE DEFENDANT FORD MOTOR COMPANY:

13 LAW OFFICES OF SLATTERY PETERSEN, PLLC
2828 North Central Avenue, Suite 1111
14 Phoenix, Arizona 85004
BY: BRADLEY W. PETERSEN, ESQ.

15
16 AND

17 LAW OFFICES OF ALSTON & BIRD, LLP
One Atlantic Center
1201 West Peachtree Street
18 Atlanta, Georgia 30309-3424
BY: KYLE G.A. WALLACE, ESQ.

19
20
21 ALSO PRESENT:

22 Mike Tunick, Certified Legal Video
Specialist

23
24 ---o0o---
25

1 A No.

2 Q If you haven't inspected any of those
3 vehicles, who it be fair to assume that you haven't
4 done any testing on any of these vehicles?

5 A I have not, but that's not relevant to
6 what we're talking about here.

7 Q Okay.

8 A They're all made out of large thin pieces
9 of thermally tempered glass, and I've been
10 involved -- involved in inspecting numerous -- first
11 of all, they're not manufactured by Ford. I've
12 looked at sunroofs manufactured by the same people
13 that supply them to Ford and have done significant
14 analysis of that.

15 So to me whether it's on a Ford or some
16 other -- you know, whether it's a pickup truck or a
17 Lincoln or a Ford is not really important in the
18 consideration of the application of a large thin
19 piece of glass replacing the steel roof of a
20 vehicle.

21 Q Okay. Let me ask you this: You said
22 these panoramic sunroof modules are manufactured by
23 others; is that correct?

24 A Uh-huh.

25 Q Yes?

1 that for a fact, but I'm pretty sure that's what it
2 was.

3 Q All right.

4 A I might add that they call tempered safety
5 glass "safety glass," but if you have it horizontally
6 or hanging and it fails, it can become almost as
7 dangerous as annealed glass because the particles
8 stay interlocked.

9 My own opinion is that it's mainly safety
10 glass when you go through it and it breaks into small
11 particles, so there's some misinterpretation of why
12 that's safety glass.

13 Q Is it not NHTSA that defines what is
14 safety glass in the automotive application?

15 MR. SILVEY: Object to the form.

16 THE WITNESS: NHTSA just sees -- yeah,
17 they can define it anything they want. They can call
18 it safety glass, but that doesn't take away with --
19 away from the actual physical properties of the glass
20 under a given situation.

21 MR. PETERSEN: Q Do you know what NHTSA
22 is?

23 A National Institute or some -- Highway
24 Safety. I don't know.

25 Q Okay. Fair to summarize it as the federal

1 government agency who governs the safety of vehicles
2 on the highways and byways of the United States?

3 MR. SILVEY: Object to the form.

4 THE WITNESS: Yes.

5 MR. PETERSEN: Q Okay.

6 A That's true.

7 Q Okay. So do you know whether NHTSA has
8 any regulations specifically as to safety glass for
9 automotive applications?

10 A I'm sure they do.

11 Q Do you know what it is?

12 A No.

13 Q Do you know if there's a federal motor
14 vehicle safety standard that applies to automotive
15 glass?

16 A I suspect there is, but I've never read
17 it.

18 Q Okay. Have you ever read FMVSS 205?

19 A Probably. I didn't memorize it.

20 Q Okay. What is FMVSS 205?

21 A I believe that's the one that discusses
22 glass in vehicles, but I'm not certain.

23 Q Do you know what the purpose of FMVSS 205
24 is?

25 A No.

1 Q Would it surprise you to know that the
2 stated purpose for FMVSS 205 regards safety?

3 MR. SILVEY: Object to the form.

4 THE WITNESS: I'm a Material Scientist.
5 I'm not a government bureaucrat. I'm just telling
6 you what I know about tempered safety glass. They
7 can interpret it whatever way they want.

8 They -- for example, I read one time there
9 was a government study where they ran a Volkswagen
10 into like a '72 Oldsmobile to prove that small cars
11 were not safe. And the whole purpose was to increase
12 the sales of SUVs.

■ [REDACTED]
■ [REDACTED]
■ [REDACTED]
■ [REDACTED]
■ [REDACTED]

18 MR. PETERSEN: Q Okay. Let's talk about
19 that.

20 The Ford PSRs that fall within the
21 definition of Subject Vehicles in your report, do
22 they all comply with FMVSS 205?

23 MR. SILVEY: Object to the form.

24 THE WITNESS: I really don't know.

25 MR. PETERSEN: Q Okay. Do you have any

1 report, you refer to defects in design of Ford PSRs;
2 is that correct?

3 A Correct.

4 Q Did you identify any defects that you felt
5 were manufacturing defects in your work in this case?

6 A I did not.

7 Q You're not a warnings expert; is that
8 fair?

9 A Well, I was a safety engineer for several
10 companies. I don't know if that makes me a warning
11 expert or not.

12 Q Okay. Let me ask you a different
13 question.

14 You're not offering any opinions about
15 warnings in this case?

16 A No, I don't think I am.

17 Q Not offering any opinions about Ford's
18 expressed warranty?

19 A No.

20 Q Not offering opinions about Ford's
21 warranty handling processes, including those
22 described in Ford's Warranty and Policy Manual?

23 A No.

24 Q Have you reviewed ANSI Z26.1?

25 A I may have. You'd have to explain to me

1 what it is.

2 Q Okay.

3 A I have a hard time remembering all these
4 numbers.

5 Q ANSI Z26.1 regards automotive glass and
6 glazing.

7 A I believe I've seen it, and I think I read
8 through it, and from my perspective, it's basically
9 the same description of like, say, tempered glass.
10 It's the same as what ASTM says.

11 Q Okay. And does ANSI Z26.1 for FMVSS 205
12 provide for materials -- properties testing for raw
13 materials used in automotive glass and glazing?

14 A Possibly. I don't recall.

15 Q Do you understand whether FMVSS 205
16 provides manufacturers a choice of glazing materials
17 for applications like roof lites, l-i-t-e-s, lites?

18 A Are you talking about sunroofs?

19 Q Sure.

20 A I don't know. I haven't committed it to
21 memory, so I don't know.

22 Q Let me read something to you, and I'll ask
23 you if you agree or disagree. Okay?

24 A Sure.

25 Q And I quote, "One safety glazing material

1 A Yes. Actually, Ford didn't make it. They
2 just -- they purchase it from someone else.

3 Q Understood. But why is tempered versus
4 some other construction important to your analysis of
5 whether there's a common defect in the Subject
6 Vehicles?

7 A Well, we have to go back to the properties
8 of tempered glass, and I -- as we get into the
9 report, we can talk about it.

10 But basically you have -- about one-fifth
11 of the thickness starts at some compressive stress,
12 and I've looked at like rear windows in pickup trucks
13 and stuff, and it starts around 16 to 18,000 psi,
14 goes through zero -- so it's going negative, so it's
15 coming negative, goes through zero, goes into tensile
16 and then comes down on the other side.

17 If you penetrate that compressive layer
18 and enter the tensile layer, the glass immediately
19 self-destructs. So to me that's a defect because any
20 kind of -- like wash the car, you might scratch it,
21 you know, drag your watchband over it or -- and
22 you've created a small bruise or defect that can grow
23 over time.

24 And once that grows to the point where it
25 penetrates the tensile -- penetrates into the tensile

1 region, you create cracks that go at one mile per
2 second, so that's 36,000 miles an hour. And they
3 have videos of it showing that, "boom," it's gone.
4 So then that glass has no integrity anymore. It's
5 basically not there, and it falls down.

6 And that's a real problem when it's
7 horizontal like that. If it's vertical, it's
8 probably good because when you go into an accident or
9 something, if that window breaks, it's going to break
10 into small particles, and it's less likely to injure
11 someone. But when it's horizontally like that, it's
12 going to fall down into the vehicle.

1 glass to another construction, like laminated glass,
2 would you think that change would make the design
3 safe and not defective?

4 MR. SILVEY: Object to the form.

5 THE WITNESS: I think they should have
6 stuck with the steel.

7 MR. PETERSEN: Q Okay.

8 A Again, I'm not a designer.

9 Q I understand. And I think you've said
10 that in your report, that these panoramic sunroofs
11 have replaced what were more commonly, historically
12 all steel roofs?

13 A Correct.

14 Q And all steel, obviously, isn't going to
15 break but -- like any type of glass?

16 A Well, see, there's a major difference
17 between glass and steel. Glass is a brittle
18 material, so it doesn't absorb any energy.

19 If something hits your steel roof and
20 scratches it, all right, you have an ugly scratch
21 which you can buy some paint over at the auto parts
22 store and make it look like it wasn't scratched. But
23 if you damage glass, eventually it's going to fail.

24 Q Okay. Just, for example, say, what
25 vehicle did you arrive here in today?

1 looking for a time to break, so we'll go off the
2 record.

3 THE VIDEOGRAPHER: Okay. Off the record
4 at 11:01.

5 (Brief recess from 11:01 to 11:12 a.m.)

6 THE VIDEOGRAPHER: Back on the record at
7 11:12.

8 MR. PETERSEN: Q Have you evaluated
9 Ford's use of laminated glass in panoramic sunroofs?

10 A No.

11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]

17 Q Have you tried to evaluate failure rates
18 or replacement rates as to any type of glass in this
19 case?

20 A No.

21 Q Have you used replacement rates or failure
22 rates for your opinions in this case at all?

23 A No.

24 Q You previously mentioned some of the
25 testing done for other cases as to panoramic sunroof

1 modules from either Wabasto or Inalfa that you
2 analyzed in one way or another. Do you call that?

3 A Yes.

4 Q And we don't have that in your report or
5 in your file materials, correct?

6 A Correct.

7 Q Fair to say that you're not relying on
8 that prior testing in the Hyundai or Kia case for
9 your opinions in this case?

10 MR. SILVEY: Object to the form.

11 THE WITNESS: I can't say that that's
12 true. I mean, in terms of the failure mode, I will
13 not use them directly, but I gained a certain
14 understanding of the sunroofs from looking at those
15 failures.

16 MR. PETERSEN: Q Okay. So from looking
17 at failures in the Hyundai and Kia cases, you gained
18 some understanding as to panoramic sunroof failures
19 generally?

20 A Correct.

21 Q And those were either Inalfa or Webasto
22 panoramic sunroofs?

23 A Correct.

24 Q And as to the specifics of those sunroofs
25 and their dimensions and thicknesses and things like

1 that you can't talk about here today?

2 A Correct.

3 Q Is there anything about your findings that
4 you can share with us today in this deposition?

5 A Well, I think --

6 MR. SILVEY: Object to the form.

7 THE WITNESS: I've already mentioned that
8 they're progressive in nature.

9 MR. PETERSEN: Q Okay. As I understand
10 that, that -- that progressive in nature failure, you
11 didn't need a panoramic sunroof to be able to do
12 that. That could have been any piece of tempered
13 safety glass, correct?

14 A Yeah. I think you brought up an important
15 point, is that the specific use of the tempered glass
16 is not important. What's important is either you're
17 using tempered glass or something else. The
18 application isn't critical. It's the material
19 itself.

20 I'm a Material Scientist, so you're asking
21 me questions about sunroofs, but all of these things,
22 more or less, are applicable to other tempered glass
23 objects.

24 Q I understand.

25 As to the specifics, is there anything --

1 a mountain top pass?

2 A Yeah. Those are all unexpected events.

3 Q Okay. And you wouldn't fault the
4 panoramic sunroof, whether it was tempered or
5 laminated or something else, for being damaged by a
6 falling boulder off a mountain pass?

7 A No.

8 Q Fair enough. Okay. I think I understand.
9 All right. One of the areas -- one of the
10 criteria you have there is size, correct?

11 A Correct.

12 Q Do you know how many panels there are in
13 the 2007 to 2014 Ford Edge?

14 A I don't have that memorized, no.

15 Q Okay. Do you know what their sizes are,
16 whether they're front panel or rear panel?

17 A No.

18 Q Do you know what -- same question as to
19 the Ford Escape?

20 A No.

21 Q Ford Explorer?

22 A No.

23 Q Lincoln MKX?

24 A No.

25 Q Lincoln MKT?

1 A No.

2 Q Lincoln MKS?

3 A No.

4 Q Okay. Does the specific size other than
5 being larger than one half square meter make any
6 difference to you?

7 A I think that what we're really talking
8 about is it's a structural member of the vehicle,
9 that it's replacing a roof, and that's not directly
10 necessarily related to the actual size. It has to do
11 with its participation in the unibody construction.

12 Q Have you done anything to evaluate the
13 participation of the glass in the unibody
14 construction?

15 A Yeah.

16 Q How?

17 A I did an open and close door, saw the
18 glass flex, so that tells me the glass is going to
19 flex. If the vehicle flexes, the glass is going to
20 flex. Opening and closing a door is just one
21 example, and that's one I could test.

22 What page are you on?

23 Q I'm still looking at your report here, and
24 I'm just trying to talk a little bit about size as
25 one of the factors that you've identified.

1 Q Okay. And, obviously, I think we already
2 talked about there could be some variability sheet to
3 sheet?

4 A Yeah, could be.

5 Q And so -- but nominally if we talk about
6 20 percent or one-fifth, if you make the glass
7 thicker, you make the compressive layer thicker?

8 A Correct.

9 Q Does that make it more robust to breakage,
10 all else being equal?

11 A Yes, it --

12 MR. SILVEY: Object to the form.

13 THE WITNESS: Yes, it does, but it just
14 delays the failure. It just means the -- whatever
15 the defect is that's growing will take longer to
16 penetrate into the tensile layer.

17 MR. PETERSEN: Q What thickness is
18 typically used in conventional traditional sunroofs?

19 A Don't know.

20 Q Have you -- I'm sorry. I thought you said
21 you'd done some testing on a conventional sunroof at
22 some point in the past. Was that -- did I --

23 A I did not say that.

24 Q I apologize.

25 Without revealing any confidential

1 Q Then under the next folder is "Documents."

2 A Uh-huh.

3 Q "Ball-drop Calculations"?

4 A Correct.

5 Q That looks like some math from the Flat
6 Glass Manufacturers Association of Japan.

7 A Right.

8 Q What's the relevance to your opinions?

9 A I might have pulled that out of the other
10 file. Basically, they have an average impact model.
11 I didn't really use it for the report, so you can
12 just skip over that.

13 Q Okay.

14 A Unless you want to read it in detail.

[REDACTED]

REPORTER'S CERTIFICATE

1
2
3
4 I, KIPP HODGE, a Certified Shorthand Reporter,
5 do hereby certify that before the taking of the
6 foregoing deposition, the witness was duly sworn by
7 me to testify to the truth, the whole truth, and
8 nothing but the truth in the above-entitled matter;
9 and that the foregoing is a full, true and correct
10 transcript of the proceedings had at the taking of
11 said deposition.

12
13 I further certify that I am not of counsel or
14 attorney for either or any of the parties in the
15 above-mentioned cause, or in any way interested in
16 the outcome of said cause.

17
18 I hereby affix my signature this 29th day of
19 March, 2019.

20
21
22
23
24
25

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

KIPP HODGE
CSR #7642